Office of Environmental Management – Grand Junction

UMTRA Project

Moab UMTRA Project
2014 Site Sustainability Plan

Revision 0

November 2013

U.S. Department of Energy

Office of Environmental Management

Prepared by the Technical Assistance Contractor under contract number DE-EM0002067
and the Remedial Action Contractor under contract number DE-DT0002936
for the U.S. Department of Energy Office of Environmental Management, Grand Junction, Colorado.

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Revision 0

Review and Approval

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Revision History

Revision No.	Date	Reason/Basis for Revision
0	November 2013	Initial issue.

Contents

Figures

Photos

Table

Attachments

Acronyms and Abbreviations

AFV	alternate fueled vehicle
CBC	Consolidated Business Center
CEDR	Consolidated Energy Data Report
DOE	U.S. Department of Energy
DOE O	DOE Order
EISA	Energy Independence and Security Act
EM	Office of Environmental Management
EO	Executive Order
FIMS	Financial Information Management System
FY	fiscal year
GHG	green house gas
GSA	U.S. General Services Administration
HDPE	high-density polyethylene
HVAC	heating, ventilation, and air conditioning
ILA	industrial, landscaping, and agricultural
RAC	Remedial Action Contractor
RRM	residual radioactive material
TAC	Technical Assistance Contractor
UMTRA	Uranium Mill Tailings Remedial Action

Executive Summary

This Site Sustainability Plan is the foundation of the strategic planning for energy-conservation measures at the sites, facilities, and office areas managed by the contractors for the U.S. Department of Energy (DOE) Moab Uranium Mill Tailings Remedial Action (UMTRA) Project. This Plan identifies the performance status and planned actions in support of DOE sustainability program goals. This Plan was prepared utilizing a graded approach determined to be appropriate for the Moab Project and in accordance with "Guidance for FY2014 DOE Site Sustainability Plans," provided by the DOE Office of Environmental Management (EM) and as required by DOE Order (O) 436.1, "Departmental Sustainability." This Plan is updated annually as part of a DOE process of improvement to continue to seek opportunities to integrate sustainability into management processes.

The Moab Project site is a former uranium ore-processing facility located about 3 miles northwest of Moab in Grand County, Utah. In 2001, DOE assumed ownership of the Moab site; the DOE EM office in Grand Junction, Colorado, is responsible for managing the Moab UMTRA Project. The scope of the Moab Project is to relocate the uranium-mill tailings and associated contaminated materials at the Moab site to a permanent disposal cell constructed near Crescent Junction, Utah, predominantly by rail. Construction of the site infrastructure needed to haul and dispose of the mill tailings began in 2008. For the purposes of tracking performance against DOE site-sustainability goals, fiscal year (FY) 2008 will be used as the baseline year for the Project when the DOE-established baseline pre-dates the Project's operating status.

The Project's constructed facilities were installed with energy efficiency in the design and in compliance with DOE O 430.2B, "Departmental Energy and Utilities Management," and to comply with the former DOE Secretary's energy initiatives for real property.

The Grand Junction administrative office is a fully loaded lease, with the landlord responsible for providing all utilities. The Project utilizes relocatable facilities at the Moab and Crescent Junction sites for Project administration and operations, including the lidding and maintenance structures. All structures at both sites (except one permanent building with about 30-percent utilization) are relocatable, and potentially every structure will be demolished or removed at Project completion. These facilities do not require extensive heating, ventilation, and air conditioning (HVAC) systems. Due to the relatively short-term nature of these facilities, the Project currently has no plans to introduce advanced metering or cool-roof technology based on the cost to do so. The Project is excluded from Section 432 of the Energy Independence and Security Act (EISA) (Public Law 110-140.

In 2013, the Project participated in a Sustainable Opportunities Assessment led by EM Consolidate Business Center (CBC) staff. Subsequently, Integrated Work Plans/Job Safety Analyses were updated to ensure sustainable activities were included, an Environmental Policy Statement was signed and presented to staff, and environmental management system training was updated.

The Project has met or will meet by the required date the following DOE EM sustainability goals: Scopes 1, 2, and 3 green house gas (GHG) emission reductions, energy intensity reduction, renewable energy consumption and generation, vehicle reduction, fleet alternative fuel consumption and fuel reduction, water consumption reduction, sustainable acquisition, and electronic stewardship. The Project received the 2013 Gold Green Buy Award by reaching the Leadership Goal for nine products in five different categories, achieving excellence in Sustainable Acquisition. A summary of all of the goals is provided in Table 1, along with the Project's status and planned actions to meet them.

Table 1. Summary Table of DOE EM Sustainability Goals

SSPP Goal	DOE EM Goal	Performance Status through FY2013	Planned Actions and Contribution	Risk of Non-attainment
GOAL 1: GHG Reduction and Comprehensive GHG Inventory				
1.1	28% Scopes 1 and 2 GHG reduction by FY2020 from a FY2008 baseline (2013 target: 17%)	Because the Project didn't begin reporting until FY2009, an overall increase in Scopes 1 and 2 GHG was noted. However, Scopes 1 and 2 GHG was reduced by 44 % from FY2012. Since FY2010, when operations peaked, Scopes 1 and 2 GHG have decreased overall by 66%.	The Project has met this goal.	Low
1.2	13% Scope 3 GHG reduction by FY2020 from a FY2008 baseline (2013 target: 4%)	Commute miles were reduced by 13% from the previous fiscal year and 76% from FY2010, the peak activity year. Air miles increased by 18% over FY2012, but 32,000, miles are a small contributor to emissions totals. Since FY2010, commute and air-travel emissions have decreased by 76% combined. Excluding ground miles calculated incorrectly in prior years (having included GSA miles) still results in a decrease overall. Recycling has resulted in a 3% reduction in off-site disposal of non-hazardous solid waste from FY2012 and a 48% reduction since FY2010.	The Project has met this goal.	Low
GOAL 2: Buildings, Energy Savings Performance Contracts Initiative Schedule, and Regional and Local Planning				
2.1	30% energy intensity (BTU per GSF) reduction by FY2015 from a FY2003 baseline (2013 target: 24%)	Energy intensity decreased by 40% from FY2012 and by 68% from FY2010 when operations peaked.	The Project has met this goal.	Low
2.2	EISA Section 432 energy and water evaluations	EM has excluded the Moab Project from the EISA Section 432 requirements.	There are no plans to implement EISA Section 432 requirements.	Low

Table 1. Summary Table of DOE EM Sustainability Goals (continued)

SSPP Goal	DOE EM Goal	Performance Status through FY2013	Planned Actions and Contribution	Risk of Non-attainment
GOAL 2: Buildings, Energy Savings Performance Contracts Initiative Schedule, and Regional and Local Planning (continued)				
2.3	Individual building metering for 90% of electricity by October 1, 2012, and for 90% of steam, natural gas, and chilled water by October 1, 2015	There have been no individual meters installed.	The Project currently has no plans to introduce advanced metering based on the cost to do so.	Low
2.4	Cool roofs, if economical, for roof replacements unless the Project already has CD-2 approval. New roofs must have thermal resistance of at least R-30	There have been no roof replacements.	The Project currently has no plans to introduce cool roofs based upon receipt of CD approval.	Low
2.5	15% of existing buildings larger than 5,000 GSF are compliant with the GPs of HPSB by FY2015	All structures at both sites (except one permanent building in very poor condition) are relocatable. Therefore, an assessment for the GPs has not been performed.	There are no planned actions beyond regularly scheduled maintenance and anticipated major repairs or replacement of components over the expected service life of the facilities.	Low
2.6	All new construction, major renovations, and alterations of buildings larger than 5,000 GSF must comply with the GPs	There have been no actions beyond regularly scheduled maintenance and repairs or replacement of components.	There are no planned actions beyond regularly scheduled maintenance and anticipated major repairs or replacement of components over the expected service life of the facilities.	Low

Table 1. Summary Table of DOE EM Sustainability Goals (continued)

SSPP Goal	DOE EM Goal	Performance Status through FY2013	Planned Actions and Contribution	Risk of Non-attainment
GOAL 3: Fleet Management				
3.1	10% annual increase in fleet alternative-fuel consumption by FY2015 relative to a FY2005 baseline (2013 target: 114% cumulative since 2005)	E85 fuel consumption has increased by 650% since FY2008. However, since a peak consumption of 1,311 gallons in FY2010, it has decreased by 50%, which is consistent with an overall Project fuel-consumption decrease of 55%.	Currently, E85 fuel, while available in Grand Junction, is not available in the Moab or Crescent Junction areas. If E85 becomes available, it will be utilized, meeting alternate fuel-consumption increase and petroleum fuel-reduction goals.	Low
3.2	2% annual reduction in fleet petroleum consumption by FY2020 relative to a FY2005 baseline	Overall fuel consumption decreased by 2% from the previous year. In addition, it has decreased by 55% since FY2010, meeting the goal.	It is expected that petroleum consumption will remain at the current level near term.	Low
3.3	100% of light-duty vehicle purchases must consist of AFVs by FY2015 and thereafter (75% FY2000 - FY2015)	100% of the vehicle acquisitions in FY2013 were GSA-leased AFVs, making current vehicle inventory 79% AFV. This meets the current goal.	Future vehicle procurements for the two Utah sites will consist of less expensive petroleum-fueled vehicles until such time as E85 becomes available in those regions. Once E85 becomes available to those sites, GSA-leased vehicle replacements are projected to be AFVs.	Low
3.4	Reduce fleet inventory of non-mission critical vehicles by 35% by FY2013 relative to a FY2005 baseline	By FY2012, the Project reduced its fleet by 13 vehicles, meeting the 35%-reduction goal for FY2013.	The Project has met this goal. There are no further actions planned.	NA

Table 1. Summary Table of DOE EM Sustainability Goals (continued)

SSPP Goal	DOE EM Goal	Performance Status through FY2013	Planned Actions and Contribution	Risk of Non-attainment
GOAL 4: Water Use Efficiency and Management				
4.1	26% potable water intensity (gallons per GSF) reduction by FY2020 from a FY2007 baseline (2013 target: 12%)	Tailings removal operations did not begin until FY2009, so water intensity calculations are not available until then. A waterline was constructed to the Crescent Junction site from the Green River, thus reducing total domestic water usage for the Project and meeting the 26% water intensity reduction goal.	There are no further actions planned.	NA
4.2	20% water-consumption (gallons) reduction of ILA water by FY2020 from a FY2010 baseline (2013 target: 6%)	Because water is necessary to meet dust-suppression and compaction requirements consumption-reduction goals are not appropriate. However, ILA water consumption has been reduced by 62% since FY2010.	The Project has met this goal.	Low
GOAL 5: Pollution Prevention and Waste Reduction				
5.1	Divert at least 50% of non-hazardous solid waste, excluding construction and demolition debris, by FY2015	There was a 3% reduction in off-site non-hazardous solid waste disposal from FY2012 and a 48% reduction since FY2010. Non-hazardous solid waste diverted in FY2013 consisted of commonly recycled items (e.g., batteries, fluorescent light bulbs, aluminum cans, plastic bottles, paper, and cardboard).	Waste-reduction practices for this Project will continue at the present level. Due to the remote location of the Project sites, many diversion options are not available.	Low
5.2	Divert at least 50% of construction and demolition materials and debris by FY2015	There were no construction or demolition activities performed in FY2013.	No construction activities are anticipated before FY2016.	NA
GOAL 6: Sustainable Acquisition				
6.1	Procurements meet requirements, including necessary provisions and clauses (Sustainable /Bio-based Procure-ments)	90% of procurements developed by the TAC and the RAC contained the necessary provisions and clauses.	Sustainable procurement activities will continue in an effort to meet and maintain DOE goals.	Low

Table 1. Summary Table of DOE EM Sustainability Goals (continued)

SSPP Goal	DOE EM Goal	Performance Status through FY2013	Planned Actions and Contribution	Risk of Non-attainment
GOAL 7: Electronic Stewardship and Data Centers				
7.1	All data centers are metered to measure a monthly PUE of 100% by FY2015.	NA	NA	NA
7.2	Maximum annual weighted average PUE of 1.4 by FY2015.	NA	NA	NA
7.3	Electronic Stewardship - 100% of eligible PCs, laptops, and monitors with power management actively implemented and in use by FY2012	All eligible PCs, laptops, and monitors have power management actively implemented and in use.	This goal has been met.	NA
GOAL 8: Renewable Energy				
8.0	20% of annual electricity consumption from renewable sources by FY2020 (2013 target: 7.5%)	The Project currently participates in the Blue Sky Renewable Energy Program by buying 10% renewable energy.	The Project plans to continue its commitment to participate in the Blue Sky Renewable Energy Program by buying renewable energy, increasing it to 20% to meet the DOE goal by FY2020.	Low
GOAL 9: Climate Change Adaptation				
9.0	Climate Change Adaptation – Address DOE Climate Adaptation Plan goals	In FY2012, the Project worked with the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service to gain support for the creation of wetland-plant communities in an area particularly prone to flooding.	Due to the comparatively near-term completion date for the Project, no additional climate change adaptation efforts are currently planned.	N/A

AFV = alternate fueled vehicle; BTU = British Thermal Unit; GP = guiding principle; GSA = General Services Administration; GSF = gross square feet; HPSB = high-performance and sustainable building; ILA = industrial, landscaping, and agricultural; NA = not applicable; PC = personal computer; PUE = power utilization effectiveness; RAC = Remedial Action Contractor; SSPP = Site Sustainability Performance Plan; TAC = Technical Assistance Contractor

1.0 Introduction

The Moab Project site is a former uranium ore-processing facility located about 3 miles northwest of Moab in Grand County, Utah. In 2001, DOE assumed ownership of the Moab site; the DOE EM office in Grand Junction, Colorado, is responsible for managing the Moab UMTRA Project. The scope of the Project is to relocate the 16-million-ton uranium mill-tailings pile and associated contaminated materials at the Moab site to a permanent disposal cell constructed near Crescent Junction, Utah, predominantly by rail. Construction of the site infrastructure needed to haul and dispose of the mill tailings began in 2008. It was completed in FY2009, when the operation phase of the Project began. For the purposes of tracking performance against DOE site-sustainability goals, FY2008 is used as the baseline year for the Project when the DOE-established baseline pre-dates the Project's operating status; however, since construction was not completed and operations did not begin until FY2009, all energy usage and emission data increased after the baseline date. The level of activity has fluctuated during the past 3-½ years since tailings-removal operations began, partly due to American Recovery and Reinvestment Act (Public Law 111-5) funding, which peaked in FY2010.

This year, the Project participated in a Sustainable Opportunities Assessment led by EMCBC staff. Subsequently, Integrated Work Plan checklists were updated to ensure sustainable activities were included, an Environmental Policy Statement was signed and presented to staff, and environmental management system training was updated.

1.1 Site Maps and Photographs

Figure 1 shows the general location of the sites relative to Moab and other geographical locations. Site features maps of Moab and Crescent Junction are shown in Figures 2 and 3, respectively. Photos 1 and 2 show the relocatable facilities in the administrative areas at the Moab and Crescent Junction sites, respectively.

1.2 Facilities and Infrastructure Overview

Facilities infrastructure at the Moab site is comprised of:

- Trailers that provide office space, restrooms, showers, break rooms, radiological-access control, security- and site-access control, and conference areas.
- A canvas-covered maintenance structure.
- A lidding structure.
- A constructed warehouse.
- Remediation wells, either for extracting contaminated ground water or injecting freshwater (diverted river water) in addition to various monitoring wells.
- An evaporation pond located on top of the tailings pile, a freshwater storage pond, and four associated pumping systems.
- A freshwater intake structure and associated pumps.
- A decontamination pad to scan vehicles and equipment for contamination and a container-rinse system that rinses any residual contamination off the containers before they leave the site.
- Roads, parking lots, and a rail load-out area.
- Fencing.
- Underpass.

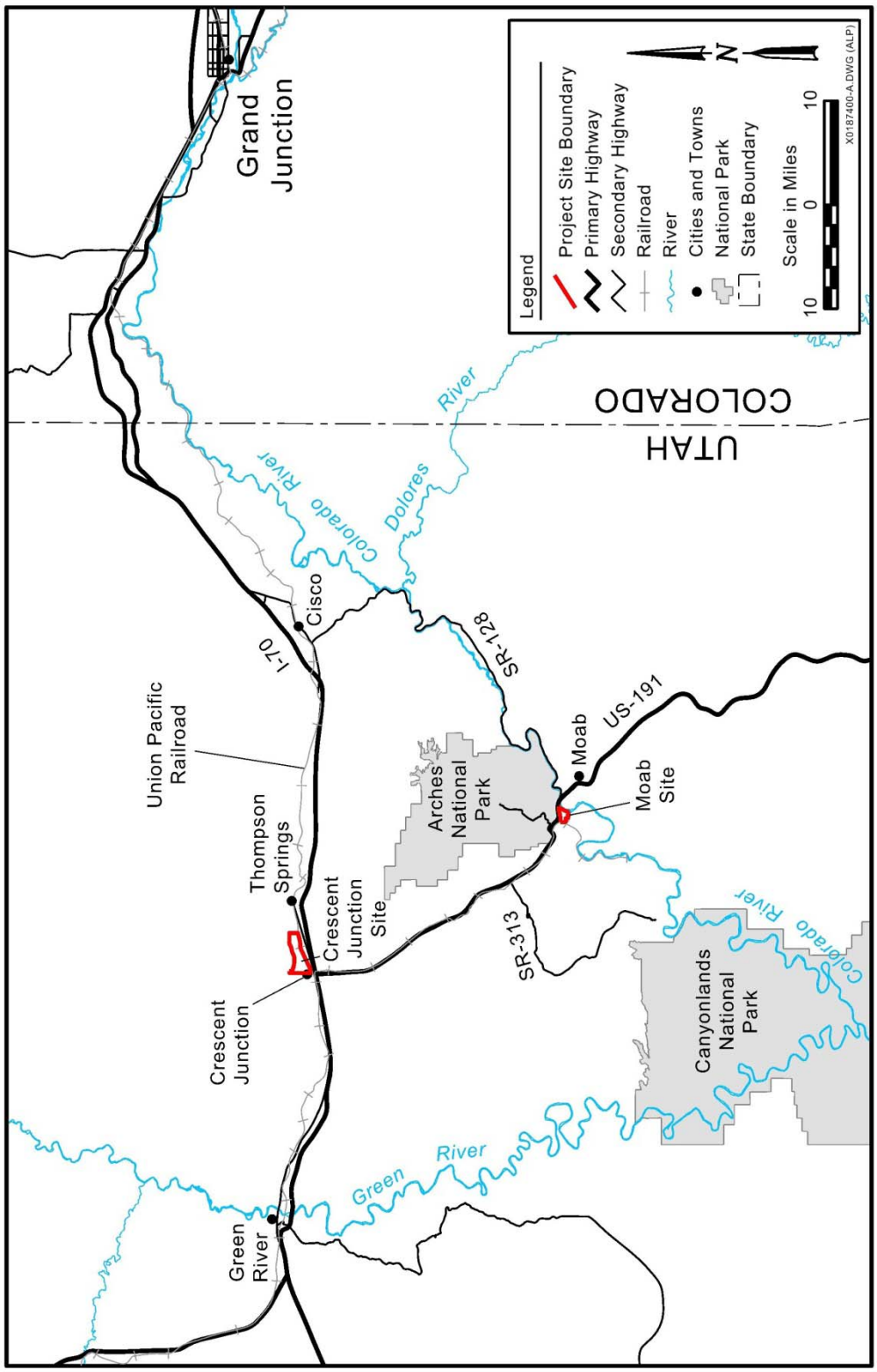

Figure 1. Location of Moab Site and Crescent Junction Disposal Site

Photo 1. Moab Project Site Administrative Area

Photo 2. Crescent Junction Site Administrative Area

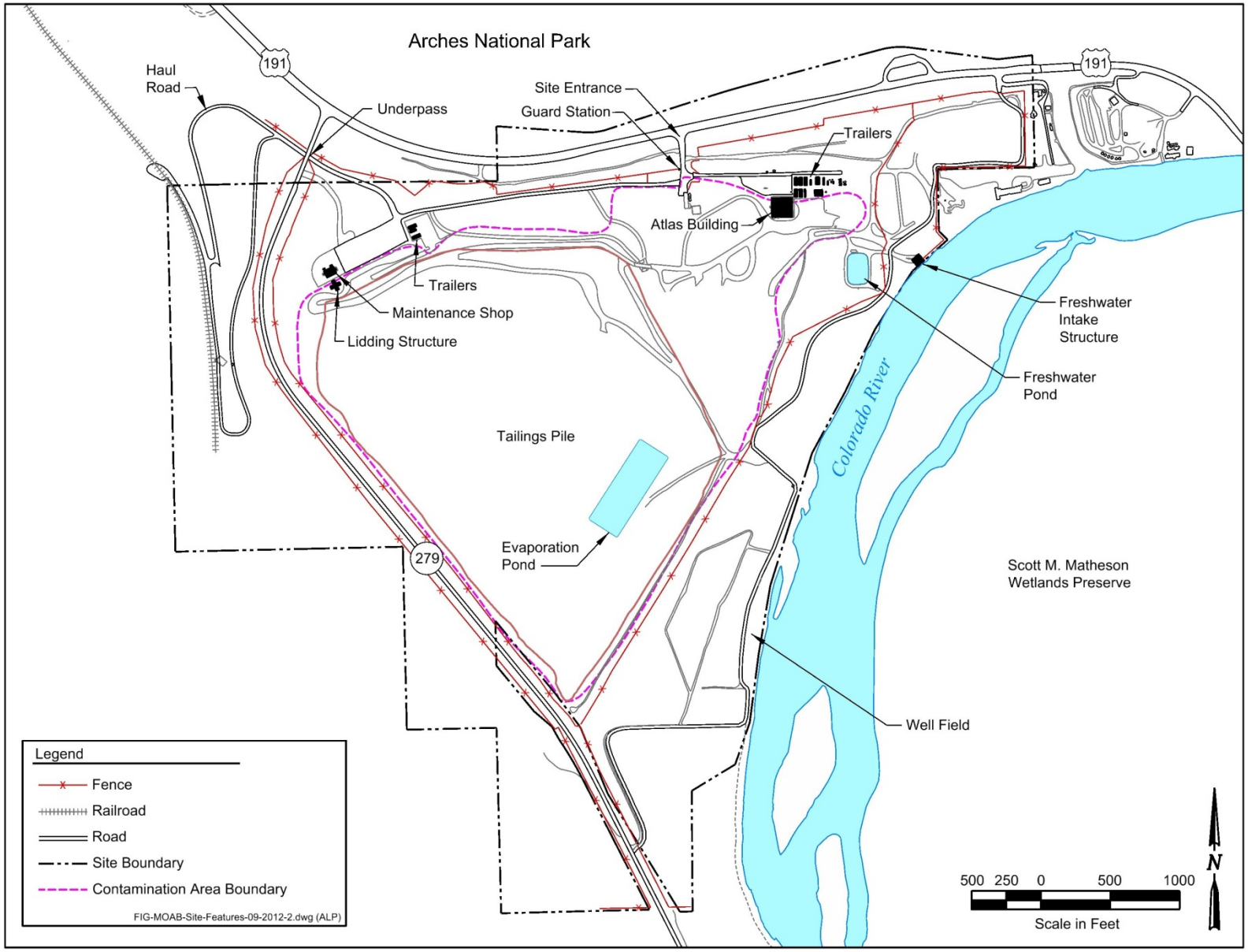

Figure 2. Moab Project Site Features

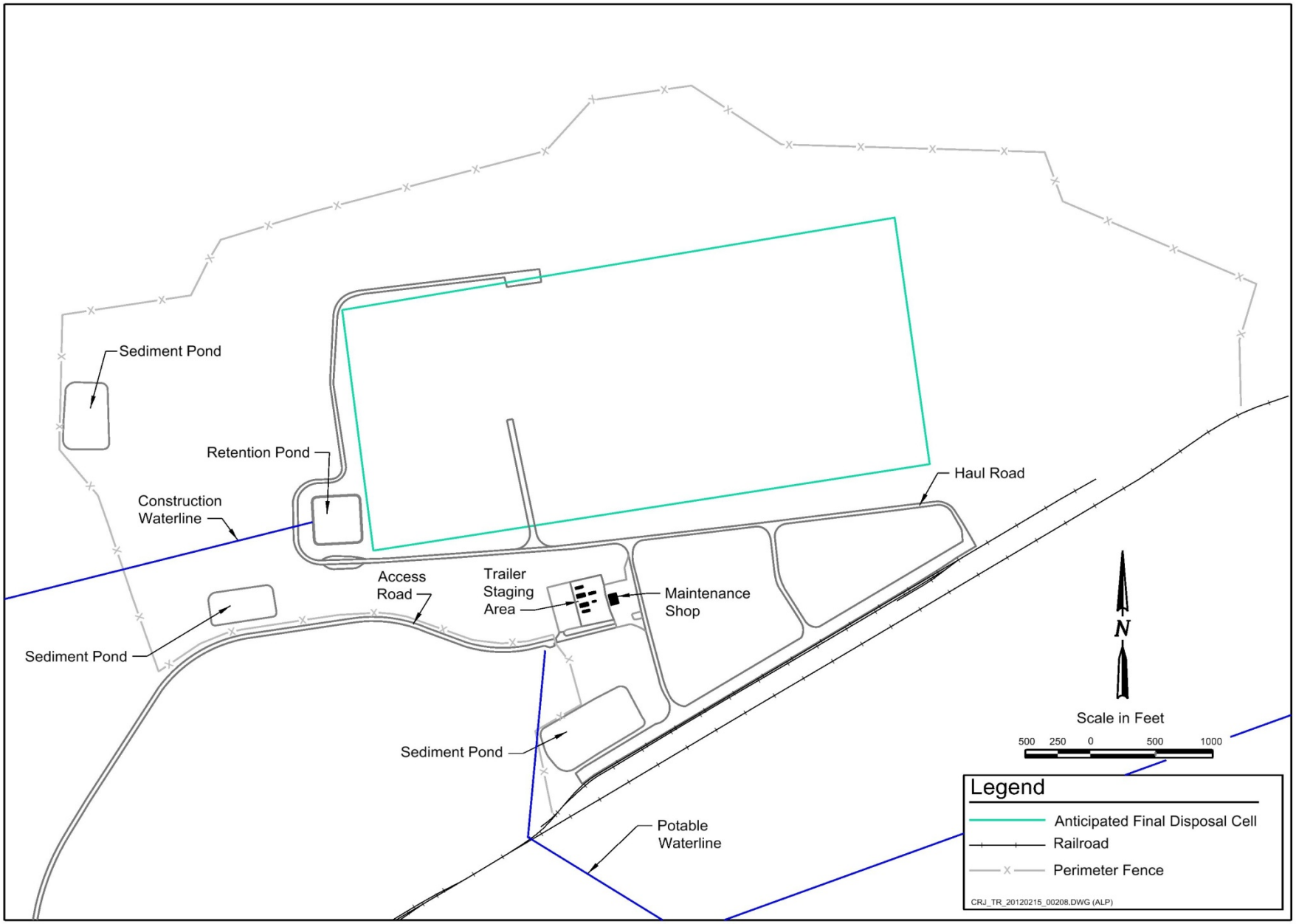

Figure 3. Crescent Junction Site Features

Facilities infrastructure at the Crescent Junction site includes:

- Trailers that provide office space, security- and site-access control, restrooms, break rooms, and a conference area.
- A canvas-covered maintenance structure.
- Roads, parking lot, and a rail load-out area.
- Storm water-retention ponds.
- Construction and domestic waterlines.
- Freshwater storage pond.
- Disposal cell.
- Fencing.

1.3 Utilities Overview

Utilities are defined as the private or public service facilities such as gas, electricity, telephone, water, and sewer that are provided as part of the development of the land. Below is an overview of the utilities at the Project sites.

- The Moab site non-potable water-supply system currently consists of river pumps, wells, storage pond, freshwater infiltration trench, sand filter, water truck-fill station, spray evaporators, and an evaporation pond on the tailings pile. The Crescent Junction site construction water system consists of a 21-mile pipeline and associated pumping stations that transport water from the Green River to a retention pond that gravity feeds a water truck-fill station.
- Potable water for the Moab site is trucked in and stored in plastic water tanks and distributed via a booster pump in waterlines to the restroom trailers. Potable water for the Crescent Junction site is piped from Thompson Springs through a 6.3-mile waterline.
- The electrical-distribution systems at the Moab and Crescent Junction sites include poles, lights, conduit, lines, and junction boxes. Minor upgrades will be performed on an as-needed basis as part of the daily site operations.
- Septic tanks, leach field, and collection piping to trailers were installed at both the Moab and Crescent Junction sites. No significant issues are foreseen unless work scope increases dramatically. Minor upgrades will be performed on an as-needed basis as part of the site operations.
- There are no natural gas utilities.
- There are no central steam systems.

1.4 Energy Management/EOs 13423 and 13514 Initiatives

The Project's constructed facilities were installed with energy efficiency in the design, in compliance with DOE O 430.2B, and to comply with the E Secretary's energy initiatives for real property. In a memorandum dated August 21, 2007, and codified in EO 13514, "Strengthening Federal Environmental, Energy, and Transportation Management," the former DOE Secretary indicated that DOE would exceed the goals established in EO 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," by applying Leadership in Energy and Environmental Design criteria established by the United States Green Buildings Council.

2.0 Performance Status

2.1 Goal 1: GHG Reduction and Comprehensive GHG Inventory

2.1.1 Scopes 1 and 2 GHG Reduction

Performance Status
Excavation, transportation, and disposal activities at the Moab and Crescent Junction sites consisted of a single shift, 4 days per week. Scopes 1 and 2 GHG was reduced by 44 percent from last year. Table 1 shows a goal of a 28-percent reduction in GHG emissions by FY2020 from the FY2008 baseline. Because the Project was in construction phase in FY2008 and operations didn't begin until FY2009, an overall increase in Scopes 1 and 2 GHG emissions was noted from FY2008 to FY2009; however, the trend from 2010 to 2013 was downward, achieving an overall reduction of 66 percent.

Planned Actions
The Scopes 1 and 2 GHG 28-percent reduction by FY2020 goal of has been met per the DOE Consolidated Energy Data Report (CEDR) Tab 3.1.

2.1.2 Scope 3 GHG Reduction

Performance Status
Commute miles were reduced by 13 percent from the previous fiscal year and 76 percent from FY2010. The Remedial Action Contractor (RAC) works a 4-day per week schedule, while the Technical Assistance Contractor (TAC) allows an alternate work schedule, both of which contribute to fewer commute miles and lower energy use. Teleconferencing and video conferencing are used extensively to reduce travel. Air miles increased by 18 percent in FY2013, but an increase of 32,000 miles is a small contributor to emissions totals. Since FY2010, commute and air travel emissions have decreased by 76 percent combined, excluding ground miles that were calculated incorrectly in previous years (having included GSA miles). Ground miles were minimal, and a decrease was noted. Recycling efforts have resulted in a 3-percent reduction in off-site non-hazardous solid waste from FY2012 and a 48-percent reduction since FY2010.

Planned Actions
The Scope 3 GHG 13-percent reduction by FY2020 goal has been met (CEDR Tabs 3.1, 3.2, and 3.3). Composting activities have been initiated and will be an ongoing activity.

2.2 Goal 2: Buildings, Energy Savings Performance Contracts Initiative Schedule, and Regional and Local Planning

2.2.1 Energy Intensity Reduction

Performance Status
Energy intensity decreased by 40 percent from FY2012 and by 68 percent from FY2010, when operations peaked. To meet the Federal Buildings Personnel Training Act of 2010 (Public Law 111-308) requirements, facility-management staff core competencies for the Moab Project were identified and provided to the EMCBC Realty Officer.

Planned Actions
The energy intensity 30-percent reduction by FY2015 goal has been met (CEDR Tab 3.1).

2.2.2 EISA Section 432 Energy and Water Evaluations

Performance Status
EM has excluded the Project from the EISA Section 432 requirements. The Project has no "covered facilities" to report (CEDR Tab 11).

Planned Actions
There are no plans to implement EISA Section 432 requirements (CEDR Tab 2.1).

2.2.3 Metering

Performance Status
The Grand Junction administrative office is a fully loaded lease, with the landlord responsible for providing all utilities. All structures at both sites (except one permanent building with about 30-percent utilization) are relocatable, and potentially every structure will be demolished or removed at Project completion. The Moab and Crescent Junction sites have electric meters will be demolished or removed at Project completion.

Both sites use propane for heating the maintenance structures. In addition, a water meter has been installed for construction water at the Moab site and for both potable and construction water at the Crescent Junction site.

Planned Actions
Currently, the Project has no plans to introduce advanced metering based on the cost to do so (CEDR Tab 2.1).

2.2.4 Cool Roofs

Performance Status
The Project is utilizing relocatable facilities for Project administration and operations, including the lidding and maintenance structures located at the Moab and Crescent Junction sites. All structures at both sites (except one permanent building) are relocatable, and potentially every structure will be demolished or removed at Project completion. There have been no roof replacements.

Planned Actions
Currently, the Project has no plans to introduce cool-roof technology based on the cost to do so.

2.2.5 Sustainable Building Standards

A self-certification for the Project's excluded buildings, along with the associated Financial Information Management System (FIMS) Excluded Buildings and Trailers List report for FY2013 identifying these buildings, are located in Attachment 2.

Performance Status
Relocatable facilities, including the lidding and maintenance structures, are used for Project administration and operations at the sites. These facilities do not require extensive HVAC systems. Rocky Mountain Power performed an energy assessment in July 2009, and no major recommendations were made. The single permanent building at the Moab site was determined not to be worth assessing against high-performance sustainable building guiding principles because of its poor overall condition. This building is currently at about 30-percent utilization and used only for a contaminated soils laboratory, equipment maintenance, and storage.

Energy-efficient lighting was previously installed throughout the sites. Any lighting replaced will be energy efficient. Environmentally preferable product purchasing (e.g., LED bulbs) for major repairs or replacement continues to be utilized wherever possible.

Planned Actions
There are no planned actions beyond regularly scheduled maintenance and anticipated major repairs or replacement of components over the expected service life of the facilities.

2.2.6 New Construction and Major Renovations

Performance Status
There have been no actions beyond regularly scheduled maintenance and repairs or replacement of components (CEDR Tab 3.4).

Planned Actions
There are no planned actions beyond regularly scheduled maintenance and anticipated major repairs or replacement of components over the expected service life of the facilities.

2.3 Goal 3: Fleet Management

Sixty-six percent of the Project fleet is comprised of U.S. General Services Administration (GSA)-leased vehicles. The other 34 percent of the fleet is primarily made up of special-use vehicles kept within the controlled areas of the sites with plates removed. Fleet-management data is reported in the Federal Automotive Statistical Tool.

2.3.1 Increased Alternate Fuel Consumption

Performance Status
E85 fuel consumption has increased by 1,530 percent at the Grand Junction office since operations began in FY2008. This represents a cumulative increase of 1,530 percent since FY2005.

Planned Actions
While available in Grand Junction, E85 fuel is not currently available in the Moab or Crescent Junction areas. If E85 becomes available in these areas, it will be utilized, meeting alternate fuel-consumption increase and petroleum fuel-reduction goals.

2.3.2 Reduction in Fleet Petroleum Consumption

Performance Status
Overall fuel consumption decreased by 4 percent in FY2013 from the previous year. In addition, it has decreased by 66 percent since peak operations in FY2010, meeting the goal.

Planned Actions
It is expected that petroleum consumption will remain at the current level for the near term.

2.3.3 Increased Alternate Fueled Vehicle Acquisition

Performance Status
As the GSA-leased vehicles are exchanged according to the GSA replacement schedule, alternate fueled vehicles (AFVs), are supplied, assuming they meet operational needs. One hundred percent of the vehicle acquisitions in FY2013 were alternative fuel GSA-leased vehicles, meeting the 75-percent goal for FY2000 through FY2015. Currently, 79 percent of the GSA-leased vehicle fleet is comprised of AFVs. Four AFVs are kept in Grand Junction. One is a hybrid, and three are flex-fuel vehicles that use E85 fuel. Eleven AFVs are kept in Moab and Crescent Junction. All are flex-fuel vehicles.

Planned Actions
Future vehicle procurements for the two Utah sites will consist of less expensive petroleum-fueled vehicles until such time as E85 becomes available in those regions. Once E85 becomes available to those sites, GSA-leased vehicle replacements are projected to be AFVs.

2.3.4 Reduction of Fleet Inventory

Performance Status
By FY2012, the Project reduced its fleet by 13 vehicles, meeting the 35-percent reduction goal for FY2013.

Planned Actions
The Project has met the 35-percent reduction goal for FY2013.

2.4 Goal 4: Water Use Efficiency and Management

Potable water for the Moab site is trucked in and stored in plastic water tanks and distributed via a booster pump in waterlines to the restroom trailers. The system was not sized to provide fire protection. Potable water for the Crescent Junction site is piped from Thompson Springs through a 6.3-mile waterline.

A waterline was installed from the Green River to the Crescent Junction site to provide construction water, thus reducing total domestic water usage for the Project and meeting the 26-percent water intensity reduction goal. To manage the water usage, meters have been installed on the DOE domestic waterline and the Green River waterline at Crescent Junction. In addition, when rainwater is available in appreciable quantities, it is utilized for construction purposes.

2.4.1 Potable Water Reduction

Performance Status
The Project continues to meet the 26-percent water intensity reduction goal. Consumption fell 65 percent from FY2012 and 95 percent from the FY2008 baseline, when water-consumption tracking began (CEDR Tab 3.1).

Planned Actions
The Project has met the 26-percent reduction goal, and there are no further actions planned.

2.4.2 Industrial, Landscaping, or Agricultural Water Reduction

Performance Status
Because water is necessary to meet dust-suppression and compaction requirements, consumption-reduction goals are not appropriate; however, industrial, landscaping, and agricultural water consumption has been reduced by 62 percent since FY2010 (CEDR Tab 3.1).

Planned Actions
The Project has met this goal.

2.5 Goal 5: Pollution Prevention and Waste Reduction

2.5.1 Recycling and Waste Diversion

Performance Status
There was a 3-percent reduction in off-site, non-hazardous solid-waste disposal since FY2012 and a 48-percent reduction since FY2010 (CEDR Tab 9.1b).

Between December 2012 and March 2013, the Project replaced disposable liners in the tailings-shipping containers with ultra-high density, multi-use plastic liners to reduce waste, increase safety, reduce lifecycle costs, and enhance efficiency by minimizing holdup of tailings in the containers. For the remaining life of the Project, approximately 300,000 disposable plastic liners, weighing 915 metric tons, will be diverted from the waste stream.

Waste-water volume reduction of as much as 18,000 gallons per year to the Moab on-site septic system was realized following the purchase of four waterless urinals in FY 2013 (CEDR Tab 7.1a).

Day-to-day site work and operations are routinely evaluated, especially by employees in the field, to identify pollution-prevention and waste-minimization opportunities. Site staff accurately measure and document waste-generation, pollution-prevention, and waste-minimization activities. All work locations provide employees with both local and centralized recycling stations, and employees are encouraged to utilize them for appropriate materials. All electronic equipment and batteries are recycled through vendors to divert waste. Two-sided copying using 50-percent recycled paper is used where equipment technology supports it. Seventy-five percent of all used oil is shipped to a recycling vendor. Approximately $88,000 worth of supplies and equipment, excess to the Project, were sold through GSA or re-utilized by another agency, keeping it out of the waste stream.

There were no construction or demolition activities performed by the Project.

Planned Actions
Waste-reduction practices for this Project will continue at the present level. Abandoned electrical wire will be recycled by the Project's electrical contractor. Due to the remote location of the site, many diversion options are not available. No construction or demolition activities are anticipated before FY2016.

2.6 Goal Six: Sustainable Acquisition

The Project Green Team consists of representatives from the TAC and the RAC, including environmental staff, and meets quarterly to review performance against annual goals.

2.6.1 Sustainable Procurement

Performance Status
The Project received the 2013 Gold Green Buy Award by reaching the Leadership Goal for nine products in five different categories, achieving excellence in Sustainable Acquisition.
The 2013 Sustainability Acquisition Priority Goals are shown in Attachment 1, including energy-efficient, water-efficient, bio-based, and recycled-content products, that are reported in the Pollution Prevention Tracking Reporting System. Equipment and supplies, excess to other federal agencies, are procured whenever possible in place of purchasing new items. Due to these efforts, a cost avoidance of approximately $150,000 was realized by the Project, and these materials potentially removed from the waste stream in FY2013.

Ninety percent of procurements by the TAC and the RAC contained the necessary provisions and clauses for eligible procurements (CEDR Tab 2.2).

Planned Actions
Sustainable procurement activities will continue in an effort to meet and maintain the 95-percent goal for eligible procurements.

2.7 Goal 7: Electronic Stewardship and Data Centers

2.7.1 Data Centers and Electronic Stewardship

Performance Status
The Project maintains no data centers (CEDR Tab 5.1). The Project purchases its electronic equipment to meet sustainable procurement goals whenever possible. All electronics purchased in FY2013 met the environmentally preferred procurement goals, and there were no electronics disposed of in FY2013 (CEDR Tab 5.2). All eligible personal computers, laptops, and monitors have power management actively implemented and in use (CEDR Tab 5.3).

Planned Actions
The Project will continue to purchase equipment that meets the sustainable procurement criteria.

2.8 Goal 8: Renewable Energy

Performance Status
The Moab and Crescent Junction sites receive power from overhead lines through the Rocky Mountain Power distribution system. The Project currently participates in the Blue Sky Renewable Energy Program by buying 10-percent renewable energy, thus exceeding the 7.5-percent DOE goal up to and through FY2013 (CEDR Tab 3.2b). With this participation level, the RAC and the Project have received Blue Sky Champion Partner and U.S. Environmental Protection Agency Green Power Partner designations. In addition, the sites have four meteorological stations (one off site), a sand-filter system, and a disposal cell operations-monitoring system, all powered by solar panels (CEDR Tab 3.2a).

Planned Actions
The Project plans to continue its commitment to participate in the Blue Sky Renewable Energy Program by buying up to 20-percent renewable energy to meet the newly mandated DOE goal of 20 percent of annual electricity consumption from renewable sources by FY2020.

2.9 Goal 9: Climate Change Adaptation

Performance Status
In FY2012, the Project worked with the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service to gain support for the creation of wetland-plant communities in an area particularly prone to flooding.

Planned Actions
Due to the comparatively near-term completion date for the Project, no additional climate change adaptation efforts are currently planned.

3.0 Fleet Management Plan

The TAC Property Manager arranges and coordinates the Project's GSA vehicle leases, directs acquisition and disposition activities, and provides utilization guidance in conjunction with the *Moab UMTRA Project Motor Vehicle Procedure* (DOE-EM/GJ1554) provided in Attachment 3. In addition, the Property Manager provides annual data reporting in the Federal Automotive Statistical Tool.

The Moab and Crescent Junction sites primarily use 4x4 light-duty pick-up trucks based upon the prevalence of construction activities and off-road use. The Grand Junction office uses a sedan and 4x4 SUVs due to extensive highway travel between sites and off-road use. Vehicle acquisition is for GSA-leased vehicle replacements determined by the GSA replacement schedule. Typically, vehicle types are replaced with similar types. AFVs have been acquired whenever possible based upon the assumption that E85 fuel would become available at the Utah sites in the near term. Following receipt of a report from the Office of Inspector General titled "The Department's Fleet Vehicle Sustainability Initiatives at Selected Locations" (DOE/IG-0896), future vehicle acquisition may be adjusted to petroleum-fueled vehicles due to the lack of availability of E85 at the Utah locations. AFVs will continue to be used at the Grand Junction location where E85 fuel is available.

Vehicle utilization is reported daily using monthly trip reports that track mileage and the number of passengers for each trip and is reviewed by TAC Property Management monthly. When other than special-use vehicles are identified as having too many or too few miles based upon GSA utilization recommendations, vehicles are rotated between Project drivers to normalize usage.

All drivers of Project vehicles must complete defensive driver training and are regularly reminded about anti-idling and fueling policies among other vehicle-operation requirements.

4.0 References

DOE (U.S. Department of Energy), "Consolidated Energy Data Report."

DOE (U.S. Department of Energy), Federal Energy Management Policy "Guidelines for Establishing Criteria for Excluding Buildings."

DOE (U.S. Department of Energy), "Guidance for FY2014 DOE Site Sustainability Plans."

DOE (U.S. Department of Energy), "Record of Decision for the Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah" (6450-01-P), September 2005.

Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management."

Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance."

DOE (U.S. Department of Energy), Office of Inspector General report, "The Department's Fleet Vehicle Sustainability Initiatives at Selected Locations" (DOE/IG-0896).

DOE (U.S. Department of Energy) Order 430.2B, "Departmental Energy and Utilities Management."

DOE (U.S. Department of Energy) Order 436.1, "Departmental Sustainability."

Public Law 110-140, Energy Independence and Security Act of 2007.

Public Law 111-5, American Recovery and Reinvestment Act of 2009.

Public Law 111-308, Federal Buildings Personnel Training.

Attachment 1.
2013 Sustainability Acquisition Priority Goals

Attachment 1. 2013 Sustainability Acquisition Priority Goals

Category	Goal
Office	
Binders	**Leadership Goal: 90% of purchases meet one or more of the following:** • D-30% PC recycled and no vinyl
Bristols (cardstock)	**Leadership Goal: 90% of purchases meet the following:** • D-30% PC recycled content
Copy Paper	**Leadership Goal: 100% of purchases:** • D-50% PC recycled content
Cartridges – Toner	**Leadership Goal: 75% of purchases (by # of units or dollar amount) meet one or more of the following:** • D-remanufactured • STMC • EcoLogo 039
Electronic Equipment	
Electronics – Computer Thin Clients and Workstations	**Leadership Goal: 95% of purchases meet the following:** • D+ EPEAT registered Gold and ENERGY STAR qualified
Electronics – Imaging (copiers)	**Leadership Goal: 95% of purchases meet one or more of the following:** • D+ EPEAT registered Gold • EcoLogo 035
Electronics – Servers – Enterprise	**Leadership Goal: 95% of purchases meet the following:** • D-ENERGY STAR qualified
Grounds/Landscaping	
Vegetation	
Seed (acres)	**Leadership Goal: 95% of purchases meet the following:** • Xeriscape and/or native
Plants (each)	

Attachment 1. 2013 Sustainability Acquisition Priority Goals (continued)

Category	Goal
Custodial	
Trash Bags - Plastic	**Leadership Goal: 75% of purchases meet one or more of the following:** • EcoLogo 126 • D+ 70% PC recycled content
Cleaners - Carpet, Glass, Hand, Multi-purpose	**Leadership Goal: 95% of purchases meet one or more of the following:** • EcoLogo 104, 146, 148 • Green Seal GS-37, 41 (Avoid use of disinfectant whenever possible)
Tissue - Toilet	**Leadership Goal: 95% of purchases meet one or more of the following:** • EcoLogo 082 • Green Seal GS-01 • D+ 80% PC recycled content
Construction	
Lighting- LED Commercial	**Leadership Goal: 95% of purchases meet one or more of the following:** • D-FEMP Qualified • D-Energy Star Qualified
Operations/Shop	
Tires	**Priority Product Goal: 75% of purchases meet one or more of the following:** • D Retreads for trucks and heavy equipment
Other	
Desk Chairs	**Purchasing Reduction Goal:** Any significant product that was once frequently used and was eliminated by one or more of the following: • 35 used office chairs, excess to another federal agency, were obtained in place of new at no cost.
Waterless Toilets	**Individual Site Leadership Goal:** • Waste-water volume reduction of as much as 18,000 gallons/year with cost avoidance of $3,500/year. following the purchase of four waterless urinals

EPEAT = Electronic Product Environmental Assessment Tool;
FEMP = Federal Energy Management Program; PC = post-consumer;
STMC = Standard Test Methods Committee

Attachment 2.
Self-Certification Form and
FIMS Excluded Buildings and Trailers List Report for FY2013

Attachment 2. Self-Certification Form

DOE BUILDING EXCLUSION
SELF-CERTIFICATION FORM
FY2013

FROM: DOE Moab UMTRA Site
Office of Environmental Management

TO: Sustainability Performance Office

DATE: November 20, 2013

SUBJECT: SELF-CERTIFICATION FORM FOR THE ENERGY-INTENSITY GOAL OF EISA 2007

Each building or group of buildings excluded under the criteria for a Part G or Part H exclusion is/are metered for energy consumption and their consumption is reported annually.

If any building has been excluded under the criteria for Part H for impracticability, all practicable energy- and water-conservation measures with a payback of less than 10 years have been installed. A justification statement that explains why process-dedicated energy in the facility may impact the ability to meet the goal has been provided in the FIMS Report 063.

I certify that the buildings listed on the Excluded Buildings List produced by FIMS as Report 063, dated 13 November 2013, for the Moab UMTRA Project (Attachment 2) meet the exclusion criteria in *Guidelines Establishing Criteria for Excluding Buildings* published by Federal Energy Management Policy on January 27, 2006.

_____
Donald R. Metzler – printed name
Moab Federal Project Director

_____
Donald R. Metzler – signature
Moab Federal Project Director

_____
Date

Contact Information: Polly Robinson
TAC Real Property Manager
Phone: (907) 257-2160
eMail: Polly.Robinson@gjemtac.doe.gov

Attachment 2. (continued)
FIMS Excluded Buildings and Trailers List Report for FY13

U.S. Department of Energy
Facilities Information Management System
Energy Consuming Excluded Buildings and Trailers List

11/12/2013

Program Office EM

Site 07011 Moab Site

Property ID Justification Comments:	Real Property Unique ID	Property Name	Exclusion Part	Property Type	Gross SQFT	Excluded SQFT
GRJ01-B	204404	Grand Junction, CO, Office Space	C - Fully serviced lease	Building	8,387	8,387
Fully serviced lease.						
GRJ01-B-RAC	205773	Grand Junction, CO, Office Space	C - Fully serviced lease	Building	1,030	1,030
Fully serviced lease.						
MOA01-BA	139766	Moab, UT, Site Building	E - Skewed energy usage	Building	22,497	22,297
The project uses 200SF of the bldg. as a soils lab. Power use consists of lighting and a small fume hood. The remaining >22K SQFT is in very poor condition and only used to store contaminated large site equipment. We meter at the site level.						

This report qualifies DOE Owned, DOE Leased, and Contractor Leased buildings and trailers where the Energy Consuming Metered Process (Excluded) Facilities gsft is greater than zero.

Attachment 3.
Moab UMTRA Project Motor Vehicle Procedure

Attachment 3. ***Moab UMTRA Project Motor Vehicle Procedure***

DOE-EM/GJ1554

Environmental Management - Grand Junction Office

MOAB UTAH

UMTRA Project

Moab UMTRA Project Motor Vehicle Procedure

Revision 2

January 2013

U.S. Department of Energy

Office of Environmental Management

Prepared by the Technical Assistance Contractor under contract number DE-EM0002067 and the Remedial Action Contractor under contract number DE-DT0002936 for the U.S. Department of Energy Office of Environmental Management, Grand Junction, Colorado.

Attachment 3. *Moab UMTRA Project Motor Vehicle Procedure* (continued)

DOE-EM/GJ1554

Moab UMTRA Project
Motor Vehicle Procedure

Revision 2

January 2013

Prepared by the Technical Assistance Contractor under contract number DE-EM0002067
and the Remedial Action Contractor under contract number DE-DT0002936
for the U.S. Department of Energy Office of Environmental Management, Grand Junction, Colorado.

Attachment 3. ***Moab UMTRA Project Motor Vehicle Procedure*** **(continued)**

Moab UMTRA Project Motor Vehicle Procedure

Revision 2

Review and Approval

Polly Robinson — Date: 1-30-2013
TAC Property Manager

Steve Kinn — Date: 2Feb13
RAC Environmental, Safety, Health, and Quality Manager

Scott Williams — Date: 2/1/13
TAC Health, Safety, and Quality Manager

Joseph D. Ritchey — Date: 1/30/2013
TAC Senior Program Manager

Jeff Biagiti — Date: 1-30-2013
RAC Project Manager

Art Murphy — Date: 1-30-2013
DOE Environmental, Safety, Health, and Quality Manager

In concurrence:

Donald R. Metzler — Date: 2-5-2013
Moab Federal Project Director

Revision History

Revision No.	Date	Reason/Basis for Revision
0	February 2008	Initial issue.
1	June 2011	Procedural review to make corrections in management assessment and company references
2	January 2013	Update includes addition of all Project vehicle procedures and pertinent DOE and EMCBC content.

Contents

Appendix

Attachments

Acronyms and Abbreviations

CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
FTR	Federal Travel Regulation
GSA	Government Services Administration
IWP	Integrated Work Plan
POA	privately owned automobile
POV	privately owned vehicle
RAC	Remedial Action Contractor
TAC	Technical Assistance Contractor
TDY	Temporary Duty
UMTRA	Uranium Mill Tailings Remedial Action
USC	United States Code

Attachment 3. *Moab UMTRA Project Motor Vehicle Procedure* (continued)

1.0 Purpose

This procedure defines the minimum requirements for driver, traffic, and vehicle controls on the Moab Uranium Mill Tailings Remedial Action (UMTRA) Project. It also includes a Traffic Control Plan in Appendix A.

2.0 Scope

This procedure applies to all Remedial Action Contractor (RAC), Technical Assistance Contractor (TAC), U.S. Department of Energy (DOE), and subcontractor personnel visitors, deliveries, and vendors who may access the Moab UMTRA Project operation and be involved in any activities.

3.0 Definitions

Texting or Text Messaging – Reading from or entering data into any handheld or other electronic device, including the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication.

Privately Owned Automobile (POA) – A car or light truck (including vans and pickup trucks) that is owned or leased for personal use by an individual.

Privately Owned Vehicle (POV) – Any vehicle such as an automobile, motorcycle, aircraft, or boat operated by an individual that is not owned or leased by a government agency, and is not commercially leased by an employee under a government rental agreement for use in connection with official government business.

Federal Travel Regulation (FTR) Reimbursement Rate – The applicable mileage rate based on the type of POV you actually use (e.g., privately owned airplane, privately owned automobile, privately owned motorcycle). These rates will be published in the FTR bulletin and will also be displayed on the General Service Administration (GSA) website (http//www.gsa.gov/mileage).

Local Travel – Any travel that is less than 50 miles from your official duty station.

Government-furnished Vehicle – A government-furnished automobile, light truck, or van.

Flex-fuel Vehicle – A vehicle that can be refueled and operated using either regular unleaded gasoline or E-85/Ethanol.

Fleet Credit Card – The government-issued credit card assigned to each government-furnished vehicle to be used for fuel and necessary maintenance.

Attachment 3. *Moab UMTRA Project Motor Vehicle Procedure* (continued)

4.0 General Information

4.1 Official Use of Motor Vehicles

Government motor vehicles may be used only for official use and for the incidental purposes described in this policy and Title 41 Code of Federal Regulations Part 102-5 (41 CFR 102-5), "Federal Management Regulation, Federal Management Regulation System" (Requirement 4.1.2).

Government motor vehicles are for federal employees and contractors for official use only. No family members, friends, strangers, or hitchhikers are permitted in the government vehicle while you are on local or temporary duty (TDY) travel. If you feel that traveling by yourself while on TDY travel is a safety issue, remember that you can always drive your own vehicle and get the lesser amount for mileage reimbursement.

Title 31 United States Code Section 1349(b) (31 USC 1349), "Adverse Personnel Actions," (Reference 4.2.2), provides for the suspension from duty of any officer or employee of the federal government who willfully uses or authorizes the use of a government passenger motor vehicle for other than official purposes. The suspension is:

- Issued by the head of the department concerned.
- Without compensation.
- For not less than one month (the suspension may be for a longer period or the officer or employee summarily removed from office if circumstances warrant).

4.2 POV Mileage Reimbursement for Official Travel

The Project must select the method most advantageous to the government when cost and other factors are considered for official travel. When the Project determines that your travel must be performed by automobile, a government motor vehicle is presumed to be the most advantageous method of transportation in accordance with 41 CFR 301-10, "Public Contracts and Property Management, Transportation Expenses," (Requirement 4.1.3).

When the use of a privately owned vehicle is determined by the Project to be advantageous to the government (e.g. if a government motor vehicle is not available), you will be reimbursed the FTR rate for use of a privately owned automobile when used for official travel in accordance with 41 CFR 301-10.303, (Requirement 4.1.3)

If you are authorized to use a government motor vehicle and use a POV instead, your reimbursement will be limited to the amount authorized by the FTR rate for use of a POA when a government motor vehicle is available in accordance with 41 CFR 301-10.310(a), (Requirement 4.1.3).

These requirements apply for both local and TDY travel.

4.3 Fuel Purchases

All fuel purchases must be made using the Fleet Credit Card assigned to the vehicle. Operators should purchase self-service E-85 or unleaded gasoline from service stations offering the lowest price. Operators should always check with the vendor to ensure the Wright Express Fleet Card is acceptable.

Flex-fuel Vehicles
Alternative fuels (E-85/Ethanol) must be used in flex-fuel vehicles when reasonably available. For the location of the most convenient alternative fuel-fueling sites, refer to the Alternative Fueling Station Locator at http://www.afdc.energy.gov/afdc/locator/stations.

4.4 Home-to-work Use of Government Motor Vehicles

Official use does not include the use of vehicles between home and a place of work except for the circumstances addressed in this policy. Employees shall have written supervisory approval before a government vehicle is issued in the situations described below. The supervisory approval may be in the form of email.

A government motor vehicle may be issued to a DOE employee at the close of the preceding workday when the employee is authorized to travel by government motor vehicle and either one of the following situations applies:

- There is a significant savings in time by permitting a departure from the employee's home.
- The employee is scheduled to depart for temporary duty, in the interest of the government, before the beginning of regular work hours.

Similarly, when an employee is scheduled to return after regular work hours, the motor vehicle may be returned the next regular workday.

This type of use of a government motor vehicle is not regarded as prohibited by 31 USC 1344, "Passenger Carrier Use" (Requirement 4.1.1).

These requirements apply for both local duty and TDY travel in accordance with DOE Guide 580.1-1, "Department of Energy Personal Property Management Program," (Reference 4.2.3).

4.5 Text Messaging While Driving by Federal Employees and Government Contractors

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving" (Reference 4.2.4), federal employees and government contractors shall not engage in text messaging when:

- Driving a government-leased, government-rented, government-owned vehicle or a POV while on official government business,
- Using electronic equipment supplied by the government while driving.

Attachment 3. *Moab UMTRA Project Motor Vehicle Procedure* (continued)

4.6 Government Vehicle Operator Requirements

Government vehicle operator requirements are listed below.

- The operator is responsible for safe driving and operation of government motor vehicles to prevent injury to self and others, and for safeguarding property from damage.
- The operator is to comply with all federal, state, and local laws and regulations regarding vehicle operations.
- Seat belt use is mandatory for each employee operating or riding in a government motor vehicle.
- It is prohibited to use tobacco products in GSA Fleet and DOE-owned motor vehicles.
- A safety checklist (provided in Attachment 1) is provided with each vehicle and must be filled out daily, before initial use. When more than one shift operates the same vehicle, a pre-operation inspection shall be performed before each shift to determine the condition of the vehicle before operation by the next employee. Any damage must be noted on the vehicle inspection sheet and reported to the supervisor.
- Defensive Driver Training is a requirement of any employee before operation of a government motor vehicle.
- Unattended vehicles must remain locked at all times.
- Vehicle fueling requirements:
    - The use of self-service pumps is required unless they are unavailable.
    - Premium gasoline must not be used unless required by the vehicle.
    - If the vehicle is capable of using alternative fuels (e.g., E-85, compressed natural gas), these fuels must be used where available.
- Follow the vehicle accident reporting requirements contained within the driver's book assigned to each vehicle.
- Vehicle operators must possess a valid operator's license and are responsible for notifying management if the license is suspended, revoked, or if any limitations are imposed on driving privileges.
- Any passenger motor vehicle shall be shut off while the vehicle is unattended (i.e., the operator of the vehicle is not within 25 feet of the vehicle). Diesel engine-powered equipment requiring long warm-up periods may be left unattended during initial warm-up; those vehicles that require wheel chocks shall have their wheels chocked in place during this time.
- Personnel involved in incidents that involve a vehicle or mobile equipment are subject to disciplinary action which may include, but is not limited to, losing their Project driving privileges, being drug tested, participating in remedial Defensive Driving training, uncompensated time off, or termination.
- The operator is personally responsible for paying any fines related to citations or tickets received as a result of the operator violating any traffic laws (i.e., moving violations such as speeding or disobeying traffic lights and signs).
- Personnel shall stay clear of all vehicles that are in motion.
- Parking areas in paved or unpaved areas should be well defined. Parking shall be in designated parking areas.
- An Integrated Work Plan (IWP) shall be in place or established to safely move disabled Project work vehicles or equipment.
- Speed limits shall be established and signs posted for Project roadways.

- All operators will be trained by a competent person and authorized before operating vehicles or equipment. All operator training shall be documented.
- Operators of equipment and vehicles shall follow the requirements of the Traffic Control Plan included in this procedure (Appendix A)

4.7 Vehicle Backing

Backing poses several hazards, and due to these hazards a backing policy has been put into place on the Moab UMTRA Project. Before any backing, the driver/operator should do a walkaround the vehicle/equipment to check for hidden or low profile obstacles. Before backing, the driver/operator of the vehicle/equipment shall honk the vehicle/equipment horn twice, check the area behind them, and then proceed to back if it is safe to do so. If the vision behind the driver/operator is blocked or obstructed by blind spots, a spotter shall be used to assist in the backing process. This policy applies to all backing activities on the Project site.

4.8 Accidents

Report accidents, theft or vandalism to the GSA vehicles by using the Accident Reporting Forms (SF-91, Motor Vehicle Accident Report and SF-94, Statement of Witness) located in the glove box and by calling the Accident Management Center 1-866-400-0411 (call 911 for injuries or serious conditions). All accidents and incidents must be reported to your supervisor within 24 hours of the accident occurrence and to the Accident Management Center within 5 calendar days. Third Party accidents and accidents involving injury require a police report.

4.9 Utilization Controls and Practices

Utilization controls and practices apply to all DOE-owned and commercially leased motor equipment and to GSA fleet motor vehicles.

Utilization controls and practices used by DOE organizations and contractors should include:

- The maximum use of motor equipment pools, taxicabs, shuttle buses, or other common service arrangements.
- The minimum assignment of motor equipment to individuals, groups, or specific organizational components.
- Individual motor equipment use records, such as trip tickets or vehicles logs, (see Attachment 2) showing the date used, name of the operator, destination, times of departure and return, mileage, and hours of use.
- The maintenance of individual motor equipment use records.
- The rotation of motor vehicles between high and low mileage assignments to maintain the fleet in the best overall replacement age and mileage balance and operating economy.
- The charging, if feasible, to the user organization for the direct and indirect cost of operating and maintaining motor vehicles assigned to groups or organizational components.
- The use of dual-purpose motor vehicles capable of hauling both personnel and light cargo to avoid the need for two motor vehicles when one can serve both purposes.
- The use of motor scooters and motorcycles in place of higher cost motor vehicles for certain applications within plant, such as messenger and mail service and small parts and tool delivery.
- The use of electric vehicles for certain applications.

4.10 Transporting Personnel and Material

Personnel will not be used to support or steady loads while a vehicle is in motion.

Riding on truck running boards, other external platforms, and/or in the beds of pickup trucks is prohibited.

Employees must be seated, with arms and legs within the confines of the vehicle. Employees may mount or dismount vehicles only when fully stopped. Personnel may not stand and ride in a moving vehicle.

When possible, personnel shall vacate and move a safe distance away from all vehicles being loaded or unloaded by a crane, backhoe, shovel, or loader. The material being loaded shall not be allowed to cross over the cab of the truck being loaded at any time if personnel are allowed to remain in the vehicle as it is being loaded (e.g., gantry crane loading containers onto trucks, equipment loading materials into containers on haul trucks).

Loads extending beyond the bed of an on-the-road truck are to be flagged. Loads are to be secured to prevent any movement.

The limit of people who may ride in a vehicle is limited by seat belt availability. When the vehicle is equipped with seat belts, they must be properly worn while the vehicle is moving.

When repair work or maintenance of any sort is performed on any vehicles, the parking brake shall be set and the wheels chocked to prevent movement of the vehicle unless other provisions are made and documented in an approved IWP. Mechanics shall follow an approved IWP when making repairs or performing maintenance on equipment and vehicles.

All on-site transportation of hazardous materials will be compliant with DOT Hazmat Regulations and the Federal Motor Carrier Safety Administration (e.g. aerosol cans, compressed gases, paint, lubricants). Transfers of materials will follow the *Moab UMTRA Project Transportation Plan* (DOE-EM/GJ1639) and DOE Order 460.1C.

4.11 Powered Industrial Trucks

All new powered industrial trucks (e.g., forklifts, platform lift trucks, motorized hand trucks) shall meet requirements established in the current version of American National Standards Institute (ANSI) Standard B56.1, "Safety Standard for Low Lift and High Lift Trucks."

All nameplates and markings shall remain in place and be maintained in a legible condition.

Only trained and authorized operators shall be permitted to operate powered industrial trucks. Operators shall be trained in the safe operation of each powered industrial truck that they are authorized to use at the facility. All training shall be conducted to meet the requirements of 29 CFR 1910.178, "Powered Industrial Trucks." All training shall be documented, and the operator shall be signed off by the subject matter expert for that piece of equipment.

No person shall be allowed to stand or pass under the elevated portion of any powered industrial truck attachments, whether loaded or empty.

No person shall ride on the lifting mechanism of a forklift or use the forklift as a work platform. A manufacturer-approved personnel basket may be used if written approval has been obtained from the manufacturer and all stipulations of such approval are met.

When a powered industrial truck is left unattended, the forks or loads shall be fully lowered, controls neutralized, power shut off, and brakes set. Wheels shall be blocked if the truck is parked on an incline.

If a powered industrial truck is found to be in need of repair, defective, or in any way unsafe, the truck shall be taken out of service until it has been restored to safe operating condition. All repairs shall be made by authorized personnel.

5.0 Records

All vehicles and equipment shall be inspected daily and documented using the appropriate forms posted on the Project's SharePoint website. Supervisors shall ensure all training is documented and maintained in accordance with Project requirements and guidance. Supervisors shall ensure all operator qualification cards shall be maintained in accordance with Project requirements and guidance.

Records shall be maintained in accordance with the Moab and Crescent Junction working file indices and plans, and the *Moab UMTRA Project Records Management Manual* (DOE-EM/GJ1545).

6.0 References

29 CFR 1910.178 (Code of Federal Regulations), "Powered Industrial Trucks."

41 CFR 102-5 (Code of Federal Regulations), "Home-To-Work Transportation."

41 CFR 301 (Code of Federal Regulations), "Public Contracts and Property Management."

31 USC 1344 (United States Code), "Passenger Carrier Use."

31 USC 1349(b) (United States Code), "Adverse Personnel Actions."

ANSI (American National Standards Institute) Standard B56.1-2005, "Safety Standard for Low Lift and High Lift Trucks."

DOE (U.S. Department of Energy), *Crescent Junction Project Site Fugitive Dust Control Plan* (DOE-EM/GJ1235-2006), July 2006.

DOE (U.S. Department of Energy) *Moab UMTRA Project Health and Safety Plan* (DOE-EM/GJ1038), August 2012.

DOE (U.S. Department of Energy), *Moab UMTRA Project Records Management Manual* (DOE-EM/GJ1545), June 2011.

DOE (U.S. Department of Energy), *Moab UMTRA Project Site Moab Fugitive Dust Control Plan* (DOE-EM/GJRAC2072), January 2013.

DOE (U.S. Department of Energy), *Moab UMTRA Project Transportation Plan* (DOE-EM/GJ1639), August 2012.

DOE (U.S. Department of Energy) Guide 580.1-1, "Department of Energy Personal Property Management Program."

DOE (U.S. Department of Energy) Order 460.1C, "Packaging and Transportation Safety."

Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving."

Appendix A.
Traffic Control Plan

Appendix A. Traffic Control Plan

A-1.0 Purpose

The purpose of this Traffic Control Plan is to ensure and promote traffic safety by providing orderly and predictable movement of all traffic and warnings necessary to ensure safe and informed operations during the Moab Project remedial action.

A-2.0 Scope

This Traffic Control Plan applies to all RAC, TAC, DOE, subcontractor personnel, visitors, deliveries, and vendors who may access the Moab UMTRA Project operation and be involved in any activities.

A-3.0 Responsibilities

The Operations/Site Manager is responsible for ensuring the safe movement and operation of all vehicles and equipment, access and haul road maintenance, snow removal, sanding, and traffic control within the boundaries of the work site.

Project employees, subcontractors, DOE, visitors, and vendors will comply with all aspects of this plan.

A-4.0 General Requirements

A-4.1 Moab Project Access

Access to any Moab Project site will be controlled as necessary to maintain security and access to any work or controlled areas. All non-Project personnel entering a Moab Project site will be directed to report to the site Administration Office or be signed in by the security guard or directed by posted signs. Physical barriers and/or signs shall be posted as needed to prevent accidental intrusion into work or posted radiological areas. All signs and postings will be in compliance with regulatory requirements and specific Project designs.

Authorized non-Project personnel shall sign in at the site Administration Office or by the guard on duty and be advised of the traffic flow pattern if they access these areas. At times, these vehicles may have to wait and be escorted in designated areas.

Visitors who have signed in at the site Administration Office and need access to the site will be escorted by a person knowledgeable of the site's traffic patterns.

A-4.2 Pedestrians

Vehicular traffic in construction areas always have the right of way; pedestrians shall yield to vehicles at all times in these areas.

Pedestrians must be aware of their surroundings and be knowledgeable of traffic patterns. Pedestrians must make radio and/or eye contact with operators when entering their work areas. Pedestrian traffic in close proximity to vehicles/equipment should only occur after verbal and/or visual approval for such movement is granted by the operator.

Vehicle operators must always be cognizant of their surroundings and watch for pedestrians.

A-4.3 Inspection and Maintenance of Haul Routes

Roadways will be kept free of obstructions. Roadways within the boundaries of the work site will be inspected regularly and after significant weather (e.g., high winds, precipitation, snow melt) events. Site management will determine if routes are impassable due to running water or damage. If a driver/operator deems the roads are unsafe for travel, they will stop their vehicle safely, notify management of the condition, and request an evaluation of the area.

The RAC will maintain Project access and haul roads for the sites. Various roads on the site cross utilities (e.g., high pressure gas lines, fiber optics, communication lines) and are not to be graded (worked on) unless prior authorization is obtained from the Operations/Site Manager. The RAC will also remove snow and apply traction material(s) as needed to access roads, parking lots, and haul routes critical to transportation and disposal activities.

A-4.4 Vehicle Safety Operations

Site workers who operate a company or Project-provided passenger vehicle will have a valid driver's license and have completed Defensive Driving Training. All drivers and operators of equipment shall have a qualification card signed off by a subject matter expert for the particular equipment being operated. Operators of clean-side haul trucks at the Moab site shall have a valid commercial driver's license with a Hazardous Materials endorsement. Operators of heavy equipment will be qualified, have the experience, skills, and knowledge to operate their equipment, copies of relevant valid licenses, certifications, and/or training records on file with the TAC Training Coordinator.

A-4.5 Equipment and Truck Inspections

Company and Project-operated vehicles, trucks, and equipment will have documented inspections before use. Passenger vehicles will use Form 3003, Daily Vehicle Inspection Log (Attachement 1). Other equipment and haul trucks will use inspection forms as designated in the approriate IWP.

Passenger vehicle drivers will document daily vehicle usage on Form 2191 Monthly Vehicle Trip Ticket (Attachment 2).

A-4.6 Signage and Traffic Control Devices

The RAC will furnish, install, and maintain the necessary traffic signage (e.g., stop signs, left-hand traffic) and/or traffic control devices within the site itself as is necessary for safe operations. Traffic control devices will be used to direct and assist vehicle operators in the guidance and navigation tasks required to travel the site haul road system safely.

A-4.7 Dust Control

Dust control for the Moab Project site roadways will be performed in accordance with the *Moab UMTRA Project Moab Project Site Fugitive Dust Control Plan* (DOE-EM/GJRAC2072) and the *Moab UMTRA Project Crescent Junction Project Site Fugitive Dust Control Plan* (DOE–EM/GJ1235).

A-4.8 Spill Control and Response

If a vehicle or equipment experiences a leak during operation, that operation shall be stopped, repairs made, and the area where the leak or spill occurred will be cleaned up. Clean up and all materials used and collected in the clean up shall be placed into a proper receptacle following Section 12.0 of the *Moab UMTRA Project Health and Safety Plan* (DOE-EM/GJ1038), which details a spill response plan.

A-5.0 Traffic Flow Requirements

A-5.1 Traffic Flow Pattern

The traffic flow pattern at each site will be controlled by the Operations/Site Manager.

Workers will use only those roads that have been designated for use and not travel off road without prior review of the intended route and approval from the Operations/Site Manager or designee. Personnel will receive instructions in the pre-shift safety meetings for specific traffic patterns changes. If changes are made to the traffic patterns during work activities, the effected drivers shall be notified of the changes. When a change in a traffic pattern interfaces with other traffic, the driver making the change shall notify all other traffic by radio of this change. Drivers will be trained and encouraged to minimize back-up maneuvers. When backing is required, workers will follow the site's backing policy. Non-work vehicles shall announce their presence before entering the area or by instructions given in the work area IWP.

A-5.2 Speed Limits

All site vehicles and equipment will be operated at safe speeds, but in no case faster than the posted or designated speed limit. Speed limit signs shall be posted in appropriate areas and designated in IWPs when necessary.

A-5.3 Passing and Following Distances

Passing stopped haul trucks, equipment, and other vehicles that are on roadways can be performed only after communications and acknowledgement with the stopped vehicle. When stopping, vehicles and equipment should be parked as far off of the haul road as possible unless they are in a designated parking area.

All passenger vehicles and equipment shall keep a safe distance between them and the vehicle or equipment preceding them. Minimum following distances for haul trucks shall be designated in the appropriate IWP for the work they are doing. Tailgating is prohibited on all site roads.

Attachment 1.
Daily Vehicle Inspection Log 3003

Attachment 1. Daily Vehicle Inspection Log 3003

DAILY VEHICLE INSPECTION LOG

SEAT BELTS shall be worn at ALL times the vehicle is in motion.
If the vehicle does NOT have a backing alarm, sound the HORN TWICE before backing.

Vehicle ID:	Make/Model:															Year:
Date:	Inspected By:	Emergency Brake	Seat Belts	Mirrors	Gauges	Turn Signals	Horn	Tires	Emergency & First Aid Kits	Headlights	Parking Lights	Brake Lights	Backup Lights	Windshield Wipers	Spare Tire	Comments:

Form 3003
Revision 3 January 2013

Attachment 2.
Monthly Vehicle Trip Ticket Form 2191

Attachment 3. *Moab UMTRA Project Motor Vehicle Procedure* (continued)

Attachment 2. Monthly Vehicle Trip Ticket Form 2191

Moab UMTRA Project

MONTHLY VEHICLE TRIP TICKET

I certify that my use of this vehicle is for official company business use only.
I further certify that I have in my possession a valid and current state drivers license,
have completed a defensive driving course, and have performed a safety inspection of this vehicle.

Vehicle License: Description:

Month/Year: Assigned to:

Start Mileage: End Mileage: Project No.:

Day of Month	Driver's Name	Employee ID No.	End Mileage	Gas Fill-up Mileage	Gallons	Cost	Org. No.	Project No.	Off Road (y/n)	No. of Pass.

Send all trip tickets to site manager on the first day of the month and start a new record.

Form 2191
Rev 1, September 2010

File Index No.:

Page 1 of 2

Moab UMTRA Project

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Form 2191
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File Index No.:

Page 1 of 2